

Work Order ID 65586

Thursday, January 20, 2011 10:19:10 AM



Page 1

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 1/21/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/10/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: mf Date: 1-20-20 Tooling: _____

Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2580

Rev.D DEO-D1

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG003

Sulox

OK Per BG 11/03/04

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio 16

2-Cut tubes as per Dwg. D2580

DP

11-2-23

B65586

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

Work Order ID 65586

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

0.00



Skidtubes

Memo

0.00

1- Deburr ends and remove bending marks

2- Prepare tube for swaging as per QSI 002

130

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

11-2-23

1 11/02/24

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Weld step D2576 as per Dwg. D2580 and QSI 004

A/R ☐ ☐ Aluminum Rod

2-Grind welds on step as per Dwg D2580

3-Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x 17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension.

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web. Deburr

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

150



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

Sulost

(XU)

11-3-1

DP

11/02/24

11/03/01

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

170

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

11/03/03

(IX)

m-l

185

Drab Green (Ref 4.2.5.11) per QSI005 4.3 (Alum)

0.00



Powdercoat

Memo

Powder Coating

START TIME:
OVEN TEMPERATURE:
FINISH TIME:

11-30
320°F
12-00

11/03/03

(IX)

m-l

1115951

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 0 2 1 0 3 6 4

| W/O: | | WORK ORDER CHANGES | | | | | |
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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of

Sikaflex on insert holes before installing wearplates

A/R ☐ ☐ ☐ Sikaflex-291 ☐ 11116010

Sikaflex expire date: 11/09

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive

A/R ☐ ☐ ☐ Sikaflex-291 ☐ 11116010

Sikaflex expire date: 11/09

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: 11116010

1 0 21/03/09

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Work Order ID 65586

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Item ID: D205-634-041

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Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 1/21/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/10/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 210 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| QC Quality Control | Memo Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024 | 0.00 | | | | | | | |
| 220 | Packaging | 0.00 | | | | | | | |
| Packaging | Memo Identify and pack for shipping as per PPPD205-634-041 Location: _____ PPP Rev: <u>A</u> | 0.00 | | | | | | | |
| 230 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| QC Quality Control | Memo | 0.00 | | | | | | | |

XL

11/3/48

CK 11/03/04

ME
11-03-04

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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NOTE: Date & initial all entries

Picklist Print

Thursday, January 20, 2011 10:19:06 AM

Page 1

Work Order ID: 65586

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube




Start Date: 1/21/2011

Required Date: 2/10/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30
KJ IPP Rev P 10.02.19
per PAR09-043 EC verified by:DD
IPP Rev. O 06.02.28 Added paperwork EC
IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q
10.12.01 as per chg003 DD verf:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D4202-1  Spacer | | Manufactured | No | | | 140 | Each | 106.0000 | 20 | 20 | | | |
| <div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> | | | | | | | | | | | | | |
| <div> <div>LG</div> <div>106</div> <div></div> </div> | | | | | | | | | | | | | |
| <div> <div>64608</div> <div>106</div> <div></div> </div> | | | | | | | | | | | | | |
| D2580-1  205 Skidtube bent detail | | Manufactured | No | | | 110 | Each | 2.0000 | 1 | 1 | | | |
| <div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> | | | | | | | | | | | | | |
| <div> <div>LG</div> <div>1</div> <div></div> </div> | | | | | | | | | | | | | |
| <div> <div>63051</div> <div>1</div> <div></div> </div> | | | | | | | | | | | | | |
| <div> <div>ST046</div> <div>1</div> <div></div> </div> | | | | | | | | | | | | | |
| <div> <div>59856</div> <div>1</div> <div></div> </div> | | | | | | | | | | | | | |
| D2576-3  Step (maching detail) | | Manufactured | No | | | 140 | Each | 62.0000 | 1 | 1 | | | |
| <div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> | | | | | | | | | | | | | |
| <div> <div>LG</div> <div>62</div> <div></div> </div> | | | | | | | | | | | | | |
| <div> <div>46661</div> <div>14</div> <div></div> </div> | | | | | | | | | | | | | |
| <div> <div>52215</div> <div>48</div> <div></div> </div> | | | | | | | | | | | | | |

BE 11/03/01
B 65529 (20)

① DP 11-2-23

BE 11/02/24

| W/O: | | WORK ORDER CHANGES | | | | | |
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Picklist Print

Thursday, January 20, 2011 10:19:07 AM

Page 2

Work Order ID: 65586

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 1/21/2011

Required Date: 2/10/2011

Start Qty: 1.00

Required Qty: 1.00

D2855 *drab-green* Manufactured No
Cap

200 Each 54.0000 1 1



HL 11/03/04

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP6 | 3 | |
| 56613 | 1 | |
| 63634 | 2 | |
| ST026 | 51 | |
| 50513 | 1 | |
| 50770 | 28 | |
| 51539 | 2 | |
| 53791 | 20 | |

AN3-5A Purchased No
Bolt

200 Each 1,085.000 2 2



HL 11/03/04

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST350 | 1085 | |
| 115016 | 385 | |
| 115371 | 500 | |
| 116632 | 200 | |

AN960JD10L NAS1149D0332J Purchased No
Washer

200 Each 0.0000 2 2



HL 117010 (x2) HL 11/03/04

Thursday, January 20, 2011 10:19:07 AM

Shop Packet Print

Page 2

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Page 3

Work Order ID: 65586

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 1/21/2011

Required Date: 2/10/2011

Start Qty: 1.00

Required Qty: 1.00

ALS7-1032-130

Purchased

No

200

Each

1,628.000

50

50



11/03/04

Insert

Location

Loc Qty

Loc Code

FP

689

115079

689

ST282

939

1116864

x16

113238

17

115502

500

115581

422

v34

AN3C4A

Purchased

No

200

Each

1,230.000

50

50



11/03/04

BOLT

Location

Loc Qty

Loc Code

ST350

1230

115300

25

115936

8

116075

997

116590

200

1116704

v50

AN960C10L

NAS1149C0332
R

Purchased

No

200

Each

25.0000

50

50



11/03/04

washer

Location

Loc Qty

Loc Code

ST245

25

107534

25

1116304

v50

Thursday, January 20, 2011 10:19:07 AM

Shop Packet Print

Page 3

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Parent Item Name: Replacement Skidtube

Start Date: 1/21/2011

Required Date: 2/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3566-13

Manufactured No

200

Each

26.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP012

6

61996

6

FP014

20

64070

20



HL 1/03/04

D3566-5

Manufactured No

200

Each

13.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP

12

64789

12

FP015

1

63574

1



HL 1/03/04

D3566-1

Manufactured No

200

Each

6.0000

2

2



Gasket

Location

Loc Qty

Loc Code

FP015

6

57715

1

63573

5



HL 1/03/04

D3564-11

Manufactured No

200

Each

8.0000

1

1



Wearshoe

Location

Loc Qty

Loc Code

FP019

8

62236

8



HL 1/03/04

1365459

41

Thursday, January 20, 2011 10:19:07 AM

Shop Packet Print

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Thursday, January 20, 2011 10:19:07 AM

Page 5

Work Order ID: 65586

Parent Item: D205-634-041



Parent Item Name: Replacement Skidtube

Start Date: 1/21/2011



Required Date: 2/10/2011

Start Qty: 1.00



Required Qty: 1.00

D3564-13 Manufactured No 200 Each 16.0000 1 1
  HL 1/03/04
Wearshoe

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP17 | 16 | B65522 |
| 59660 | 1 | |
| 61828 | 3 | |
| 62229 | 12 | |

D3564-9 Manufactured No 200 Each 17.0000 1 1
  HL 1/03/04
Wearshoe

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP | 1 | B66153 |
| 55334 | 1 | |
| FP019 | 1 | |
| 61709 | 1 | |
| FP19 | 15 | |
| 62238 | 15 | |

D3564-5 Manufactured No 200 Each 22.0000 1 1
  HL 1/03/04
Wearshoe

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FG | 1 | |
| 34806 | 1 | B65523 |
| FP19 | 2 | |
| 57525 | 1 | |
| 58709 | 1 | |
| FP-19 | 19 | |
| 63575 | 8 | |
| 65058 | 11 | |

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Shop Packet Print

Page 5

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Thursday, January 20, 2011 10:19:07 AM

Page 6

Work Order ID: 65586

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 1/21/2011

Required Date: 2/10/2011

Start Qty: 1.00

Required Qty: 1.00

D2594-3

Manufactured No

200

Each

739.0000

16

16



O-Ring, 205 Skidtube



4103104

Location

Loc Qty

Loc Code

FP

43

55546

19

58191

12

59358

12

fpa

696

61762

696

416

D2594-1

drab green

Manufactured No

200

Each

235.0000

16

16



Plug, 205 Skidtube



4103104

Location

Loc Qty

Loc Code

FP

183

42807

112

55002

71

FP14

52

58434

15

62893

37

365980

416

Thursday, January 20, 2011 10:19:07 AM

Shop Packet Print

Page 6

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

DART

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|------------------|----------------|--|------------------------|
| DESIGN # | DRAWN BY R4 | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED # | APPROVED # | DRAWING NO. D2580 | REV. D SHEET 1 OF 3 |
| DATE 07.02.27 | | TITLE 205 SKIDTUBE ASSEMBLY | SCALE NTS |
| A | 96.09.16 | NEW ISSUE | |
| B | 96.12.02 | AS MANUFACTURED | |
| C | 98.08.26 | REDRAWN, INCLUDED DEO 9094/9097 | |
| D | 07.02.27 | CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183 | |

RELEASED
07.06.28 #**DEO ATTACHED**

| QTY -041 | QTY -045 | Part Number | Description |
|-------------|-------------|---|-------------------|
| X | | D2580-041 | SKIDTUBE ASSEMBLY |
| | X | D2580-045 | SKIDTUBE ASSEMBLY |
| 1 | 1 | D2500-1-190 | EXTRUSION |
| 1 | 1 | D2576-3 | STEP |
| 20 | 24 | D2579 | CROSS BOLT SPACER |
| 16 | 16 | D2594-1 | PLUG |
| 16 | 16 | D2594-3 | O-RING |
| 1 | 1 | D2596 | 205 WEB |
| 1 | 1 | D2855 | AFT CAP |
| 1 | 1 | D3564-5 | WEARSHOE |
| 1 | 1 | D3564-9 | WEARSHOE |
| 1 | 1 | D3564-11 | WEARSHOE |
| 1 | 1 | D3564-13 | WEARSHOE |
| 2 | 2 | D3566-1 | GASKET |
| 1 | 1 | D3566-5 | GASKET |
| 1 | 1 | D3566-13 | GASKET |
| 50 | 50 | ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130 | INSERT |
| 50 | 50 | AN3C4A | BOLT |
| 2 | 2 | AN3-5A | BOLT |
| 50 | 50 | AN960C10L | WASHER |
| 2 | 2 | AN960JD10L | WASHER |

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

#65507

Diagram illustrating the grinding locations and features for the D2576-3 step:

- GRIND FLUSH (4 PLACES)
- GRIND FLUSH
- D2576-3 STEP
- LOCATION RIDGE ON UNDERSIDE OF D2576
- GRIND FLUSH

RELEASED
07-06-28

DEO ATTACHED

D2579 SPACER

D2596 WEB (REF)

AL57-1032-130 (REF)
(TYP 50 PLACES)

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR #0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 x 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 x 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

37.50
DISTANCE TO AFT END
OF D2596 WEB
3
7
1.750
1.750
Ø0.508 (TYP.)
(40 PLACES)
REFER TO DETAIL A
8.750
17.375
26.000
34.188
57.313 (REF)
7 EQUAL SPACES
8.188 PITCH
38.0
91.500
190.0
(D2500-1)

WELD AS PER DETAIL B

BLACK ANTI-SKID TO 0.5 ABOVE LOCATION RIDGE

BLACK ANTI-SKID TOP OF STEP TO 0.5 ABOVE BOTTOM EDGE

0.5

1.5

1.5

0

P

P

P

P

P

P

P

1.5

1.5

1.5

REFER TO DETAIL C

D3566-1

D3566-5

D3566-1

D3566-13

D3564-11

D3564-5

D3564-9

D3564-13

AN304A BOLT (1)

AN360C10L WASHER (1)

(50 PLACES)

DESIGN

DRAWN BY

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| | | | |
|----------|--------------------|----------|--------------------|
| DESIGN | <i>[Signature]</i> | DRAWN BY | <i>[Signature]</i> |
| CHECKED | <i>[Signature]</i> | APPROVED | <i>[Signature]</i> |
| DATE | | | |
| 07.02.27 | | | |

| | |
|------------|-------|
| DRAWING NO | D2580 |
|------------|-------|

REV. D
SHEET 2 OF 3

| | |
|-------|-----------------------|
| TITLE | 205 SKIDTUBE ASSEMBLY |
|-------|-----------------------|

SCALE

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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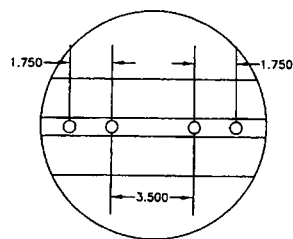
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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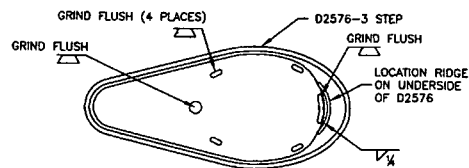
NOTE: Date & initial all entries

DETAIL E
SCALE 5:24



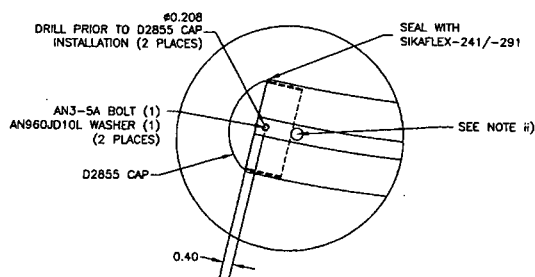
RELEASED
07-18-18

DETAIL F
SCALE 5:24

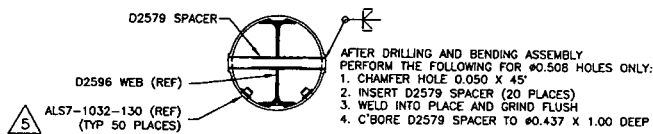


DEO ATTACHED

DETAIL G
SCALE 5:24



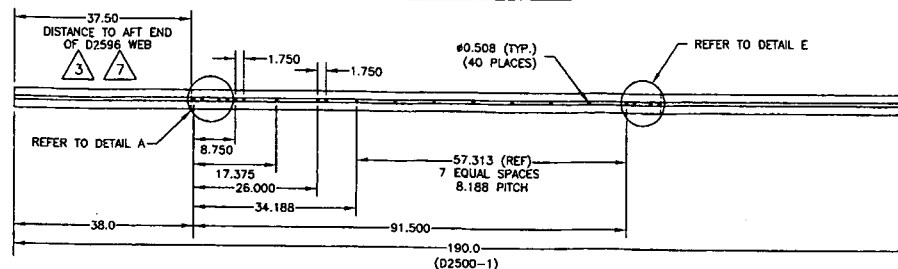
SECTION H-H
SCALE 5:24



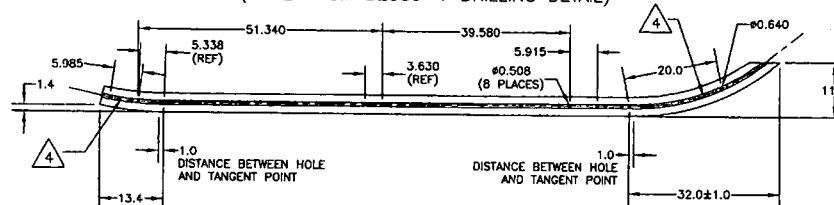
D2580-045 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2555 AFT CAP TO PREVENT INTERFERENCE
WITH THE SPACER AT THIS LOCATION

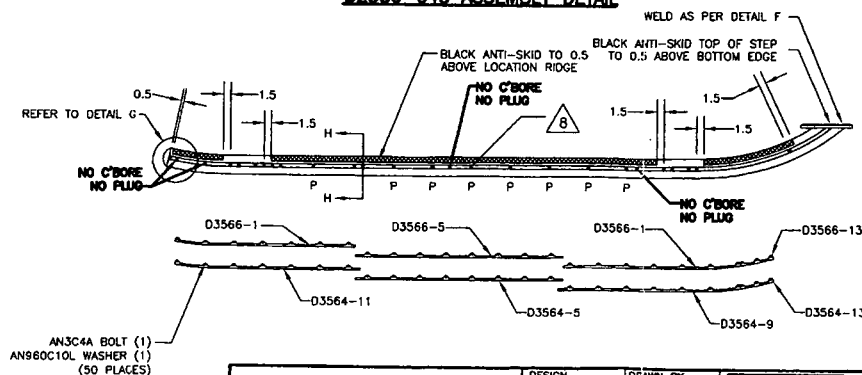
D2580-1 DRILLING DETAIL



D2580-5 BENDING AND CUTTING DETAIL
(MAKE FROM D2580-1 DRILLING DETAIL)



D2580-045 ASSEMBLY DETAIL



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| DESIGN | DRAWN BY | DART | DART AEROSPACE LTD. |
|------------------|--------------------------------|----------------------|------------------------|
| CHECKED RH | APPROVED RH | DRAWING NO. D2580 | REV. D SHEET 3 OF 3 |
| DATE 07.02.27 | TITLE 205 SKIDTUBE ASSEMBLY | SCALE 1:24 | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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NOTE: Date & initial all entries

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|----------------------|--------------------------------|------------------------|---|--|-------------------------|---------------------------|--------------|
| DRAWING NO. D2580 | TITLE 205 SKIDTUBE ASSEMBLY | REV. D | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D2580-D-1 | SHEET NO. SHEET 1 OF 1 | SCALE NTS |
| DRAWN <i>UP</i> | CHECKED <i>L</i> | MFG. APPR. <i>R</i> | APPROVED <i>MP</i> | | DE APPR. <i>H</i> | | |
| DATE 10.09.22 | DATE 10.11.04 | DATE 10.11.04 | DATE 10/11/04 | | DATE 10.11.04 | | |

PURPOSE:

CHANGE ALL WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

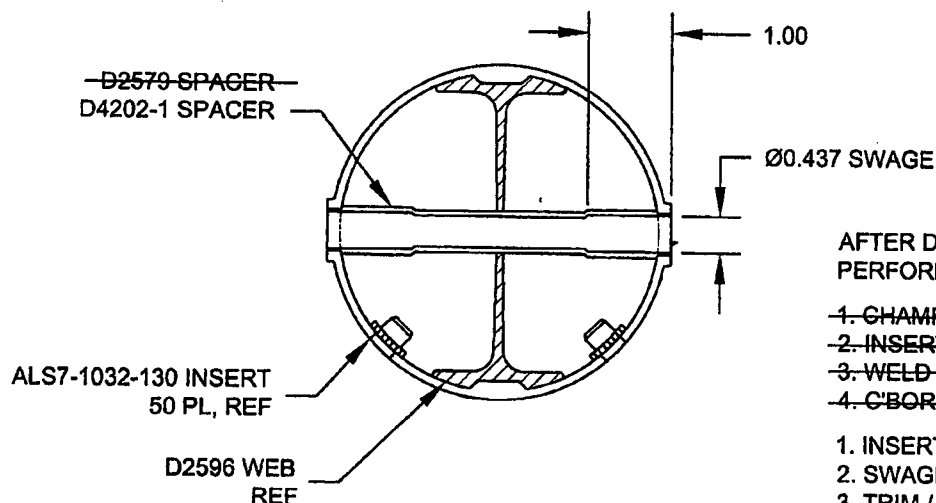
WAS

| QTY -041 | QTY -045 | PART NUMBER | DESCRIPTION |
|-------------|-------------|-------------|-------------------|
| 20 | 24 | D2579 | CROSS BOLT SPACER |

IS

| | | | |
|----|----|---------|--------|
| 20 | 24 | D4202-1 | SPACER |
|----|----|---------|--------|

SECTION D-D & SECTION H-H ARE AMENDED AS FOLLOWS:



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C-BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

1. INSERT D4202-1 SPACER, 20 PL (-041) OR 24 PL (-045)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

SECTION D-D
NOT TO SCALE

SECTION H-H
NOT TO SCALE

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| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries